ABSTRACT OF THE DISCLOSURE

When a double wire is used in a semiconductor device, it is difficult to detect the open failure of one of two wires. It is intended that this detection be carried out with a weak current and that the load regulation of the semiconductor device be improved. A series regulator is incorporated into an IC chip. A battery voltage is applied to an input pin. The output of a transistor that constitutes the regulator appears at an output pin via an output pad. A feedback signal of an output voltage appears at one end of a voltage-dividing resistor. The output pad is connected with a feedback pad via a protective resistor or diode.